```
CC   assessing and prognosing of prostatic cancer (PC). Antibodies, optionally
CC   coupled to a cytotoxin or radioisotope, and nucleic acids antisense to
CC   PCA3 cDNA are claimed to be useful for treating PC, while determining
CC   elevated levels of PCA3 (as RNA or protein) is useful for detecting a
CC   predisposition to development of PC, e.g. in prenatal tests. Detecting
CC   PCA3 protein allows differentiation between malignant and benign
CC   prostatic disease, and the level of PCA3 expression allows correlation
CC   with the grade of tumour. PCA3 protein and its fragments are also claimed
CC   to be useful in vaccines for preventing PC; in drug screens for
CC   identifying specific (ant)agonists (potentially useful therapeutically)
CC   and for studying protein-DNA interactions
XX
SQ   Sequence 820 BP; 262 A; 169 C; 191 G; 198 T; 0 U; 0 Other;

  Query Match             71.5%;  Score 513.2;  DB 2;  Length 820;
  Best Local Similarity   97.3%;  Pred. No. 1.3e-147;
  Matches  585;  Conservative    0;  Mismatches    9;  Indels    7;  Gaps    6;

Qy          1 GGAGATTTGTGTGGTTTGCAGCCGAGGGAGACCAGGAAGATCTGCATGGTGGGAAGGACC 60
              ||||||||||||||  ||||||||||||||||||||||||||||||||||||||||||||
Db         27 GGAGATTTGTGTGG-CTGCAGCCGAGGGAGACCAGGAAGATCTGCATGGTGGGAAGGACC 85

Qy         61 TGATGATACAGAGGTGAGAAATAAGAAAGGCTGCTGACTTTACCATCTGAGGCCACACAT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         86 TGATGATACAGAGGTGAGAAATAAGAAAGGCTGCTGACTTTACCATCTGAGGCCACACAT 145

Qy        121 CTGCTGAAATGGAGATAATTAACATCACTAGAAACAGCAAGATGACAATATAATGTCTAA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        146 CTGCTGAAATGGAGATAATTAACATCACTAGAAACAGCAAGATGACAATATAATGTCTAA 205

Qy        181 GTAGTGACATGTTTTTGCACATTTCCAGCCCTTTTAAATATCCACACACACAGGAAGCAC 240
              |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||
Db        206 GTAGTGACATGTTTTTGCACATTTCCAGCCCCTTTAAATATCCACACACACAGGAAGCAC 265

Qy        241 AAAAGGAAGCACAGAGATCCCTGGGAGAAATGCCCGGCCGCCATCTTGGGTCATCGATGA 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        266 AAAAGGAAGCACAGAGATCCCTGGGAGAAATGCCCGGCCGCCATCTTGGGTCATCGATGA 325

Qy        301 GCCTCGCCCTGTGCCTGNTCCCGCTTGTGAGGGAAGGACATTAGAAAATGAATTGATGTG 360
              |||||||||||||||| ||||||||||||||||||||||||||||||||||||||||||
Db        326 GCCTCGCCCTGTGCCTGGTCCCGCTTGTGAGGGAAGGACATTAGAAAATGAATTGATGTG 385

Qy        361 TTCCTTAAAGGAT-GGCAGGAAAACAGATCCTGTTGTGGATATTTATTTGAACGGGATTA 419
              |||||||||||||| |||||||||||||||||||||||||||||||||||||||||||||
Db        386 TTCCTTAAAGGATGGGCAGGAAAACAGATCCTGTTGTGGATATTTATTTGAACGGGATTA 445

Qy        420 CAGATTTGAAATGAAGTCACAAAGTGAGCATTACCAATGAGAGGAAAACAGACGAGAAAA 479
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        446 CAGATTTGAAATGAAGTCACAAAGTGAGCATTACCAATGAGAGGAAAACAGACGAGAAAA 505

Qy        480 TCTTGATGG-TTCACAAGACATGCAACAAACAAAATGGAATACTGTGATGACACGAG--C 536
              |||||||| |||||||||||||||||||||||||||||||||||||||||||| |||
Db        506 TCTTGATGGCTTCACAAGACATGCAACAAACAAAATGGAATACTGTGATGACATGAGGCA 565

Qy        537 AGCCAACTGGGGAGGAGAT-ACCACGGGGCAGA-GGTCAGGATTCTGGCCCTGCTGCCTA 594
                | | ||||||||||||| |||||||||||| ||||||||||||||||||||||||||
Db        566 GCCAAGCTGGGGAGGAGATAACCACGGGGCAGAGGGTCAGGATTCTGGCCCTGCTGCCTA 625

Qy        595 A 595
              |
Db        626 A 626
```

```
RESULT 22
AAD38815
ID   AAD38815 standard; cDNA; 876 BP.
XX
AC   AAD38815;
XX
DT   23-SEP-2002  (first entry)
XX
DE   Human PSNA cDNA, Pro123.
XX
KW   Human; prostate specific protein; PSP; prostate specific nucleic acid;
KW   vaccine; transgenic; prostate cancer; gene therapy; transgenic animal;
KW   PSNA; ss.
XX
OS   Homo sapiens.
XX
PN   WO200224718-A1.
XX
PD   28-MAR-2002.
XX
PF   19-SEP-2001; 2001WO-US029386.
XX
PR   19-SEP-2000; 2000US-0233746P.
XX
PA   (DIAD-) DIADEXUS INC.
XX
PI   Sun Y,  Recipon H,  Cafferkey R,  Ali S;
XX
DR   WPI; 2002-471216/50.
XX
PT   Novel isolated prostate specific polypeptide useful for identifying,
PT   diagnosing, monitoring, staging, imaging, and treating prostate cancer
PT   and non-cancerous disease states in prostate.
XX
PS   Claim 1; Page 179; 210pp; English.
XX
CC   The invention relates to prostate specific proteins (PSP) and prostate
CC   specific nucleic acids (PSNA). Sequences of the invention are useful for
CC   identifying, diagnosing, monitoring, staging, imaging and treating
CC   prostate cancer and non-cancerous disease states in prostate. They are
CC   also useful for producing engineered prostate tissue for treatment and
CC   research. The PSNA sequences are used in gene therapy and for producing
CC   transgenic animals and cells. The invention is also used as vaccines. The
CC   present sequence is human PSNA cDNA
XX
SQ   Sequence 876 BP; 275 A; 183 C; 207 G; 211 T; 0 U; 0 Other;

  Query Match             71.5%;  Score 513.2;  DB 6;  Length 876;
  Best Local Similarity   97.3%;  Pred. No. 1.4e-147;
  Matches  585;  Conservative    0;  Mismatches    9;  Indels    7;  Gaps    6;

Qy          1 GGAGATTTGTGTGGTTTGCAGCCGAGGGAGACCAGGAAGATCTGCATGGTGGGAAGGACC 60
              ||||||||||||||  ||||||||||||||||||||||||||||||||||||||||||||
Db         56 GGAGATTTGTGTGG-CTGCAGCCGAGGGAGACCAGGAAGATCTGCATGGTGGGAAGGACC 114

Qy         61 TGATGATACAGAGGTGAGAAATAAGAAAGGCTGCTGACTTTACCATCTGAGGCCACACAT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        115 TGATGATACAGAGGTGAGAAATAAGAAAGGCTGCTGACTTTACCATCTGAGGCCACACAT 174

Qy        121 CTGCTGAAATGGAGATAATTAACATCACTAGAAACAGCAAGATGACAATATAATGTCTAA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        175 CTGCTGAAATGGAGATAATTAACATCACTAGAAACAGCAAGATGACAATATAATGTCTAA 234

Qy        181 GTAGTGACATGTTTTTGCACATTTCCAGCCCTTTTAAATATCCACACACACAGGAAGCAC 240
              |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||
Db        235 GTAGTGACATGTTTTTGCACATTTCCAGCCCCTTTAAATATCCACACACACAGGAAGCAC 294

Qy        241 AAAAGGAAGCACAGAGATCCCTGGGAGAAATGCCCGGCCGCCATCTTGGGTCATCGATGA 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        295 AAAAGGAAGCACAGAGATCCCTGGGAGAAATGCCCGGCCGCCATCTTGGGTCATCGATGA 354

Qy        301 GCCTCGCCCTGTGCCTGNTCCCGCTTGTGAGGGAAGGACATTAGAAAATGAATTGATGTG 360
              |||||||||||||||| ||||||||||||||||||||||||||||||||||||||||||
Db        355 GCCTCGCCCTGTGCCTGGTCCCGCTTGTGAGGGAAGGACATTAGAAAATGAATTGATGTG 414

Qy        361 TTCCTTAAAGGAT-GGCAGGAAAACAGATCCTGTTGTGGATATTTATTTGAACGGGATTA 419
              |||||||||||||| |||||||||||||||||||||||||||||||||||||||||||||
Db        415 TTCCTTAAAGGATGGGCAGGAAAACAGATCCTGTTGTGGATATTTATTTGAACGGGATTA 474

Qy        420 CAGATTTGAAATGAAGTCACAAAGTGAGCATTACCAATGAGAGGAAAACAGACGAGAAAA 479
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        475 CAGATTTGAAATGAAGTCACAAAGTGAGCATTACCAATGAGAGGAAAACAGACGAGAAAA 534
```